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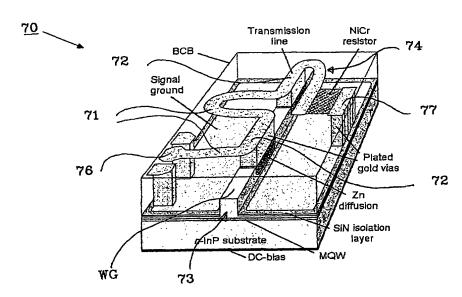
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(54) Title: AN OPTICAL MODULATOR AND A METHOD FOR ADAPTING AN OPTICAL MODULATOR



(57) Abstract: The present invention relates to an optical modulator, divided into at least two active segments separated by at least one passive segment. The modulator comprises: an optical waveguide with an optical group index no having an optical signal propagating at an optical velocity vo, and a microwave transmission line with an electrical propagation index np, having an electrical signal propagating at an electrical velocity Ve. The electrical propagation index np of the unloaded microwave transmission line is lower than the optical group index no of the optical waveguide. The loading and length of the microwave transmission line are adjusted for a specific Bloch impedance and electrical velocity ve. The invention also relates to a method for adapting the impedance of an optical modulator.

